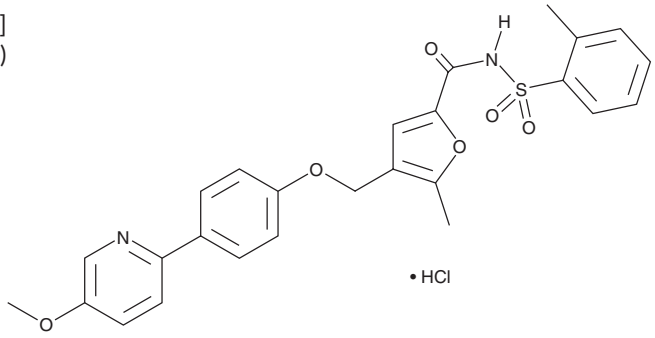
PRODUCT INFORMATION

BGC 20-1531 (hydrochloride)

Item No. 19742

CAS Registry No.:	1962928-26-2
Formal Name:	4-[[4-(5-methoxy-2-pyridinyl)phenoxy]methyl]-5-methyl-N-[(2-methylphenyl)sulfonyl]-2-furancarboxamide, monohydrochloride
Synonym:	PGN 1531
MF:	$C_{26}H_{24}N_2O_6S$ • HCl
FW:	529.0
Purity:	≥98%
UV/Vis.:	λ_{max}: 202, 273 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BGC 20-1531 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the BGC 20-1531 (hydrochloride) in the solvent of choice. BGC 20-1531 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of BGC 20-1531 (hydrochloride) in these solvents is approximately 1 mg/ml.

Description

BGC 20-1531 is a potent and selective antagonist of the prostaglandin E_2 (PGE_2; Item No. 14010) receptor subtype 4 (EP_4) with K_i values of 11.7, >10,000, and >10,000 nM for EP_4, EP_2, and EP_3, respectively.[1] It is selective for EP_4, exhibiting <50% inhibition at 47 ion channels, cell-surface transporters, enzymes, and nuclear receptors at a concentration of 10 µM. BGC 20-1531 antagonizes PGE_2-induced cAMP accumulation in a dose-dependent manner in HEK293 EBNA cells that stably express human EP_4 receptors. It also reverses PGE_2-induced vasorelaxation (K_b = 15.85 nM) in human middle cerebral and middle meningeal arterial rings. BGC 20-1531 prevents PGE_2-induced increases in carotid blood flow and decreases in carotid resistance with an ID_{50} value of 5 mg/kg in dogs.

Reference

1. Maubach, K.A., Davis, R.J., Clark, D.E., *et al.* BGC20-1531, a novel, potent and selective prostanoid EP_4 receptor antagonist: A putative new treatment for migraine headache. *Br. J. Pharmacol.* **156(2)**, 316-327 (2009).

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